

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX LABORATORY 1337 S. 46TH STREET BLDG. 201 RICHMOND, CA 94804-4698

MAR 2 0 2001

MEMORANDUM

SUBJECT: Case R01S26, SDG 01059C

Results for Perchlorate and Total Dissolved Solids Analysis

FROM: Brenda Bettencourt, Director

EPA Region 9 Laboratory (PMD-2)

TO: Kevin Mayer, Remedial Project Manager

Northern California Cleanup Section (SFD-7-2)

Attached are the report narrative and results spreadsheet from analysis of samples from the Colorado River Perchlorate Study. These data have been reviewed in accordance with EPA Region 9 Laboratory policy. Summary information for the data included in this report is as follows:

SITE/PROJECT: Colorado River Perchlorate Study

CASE: R01S26

LABORATORY: U. S. EPA Region 9 Laboratory

SAMPLE DELIVERY GROUP(s): 01059C

ANALYSIS: Perchlorate (EPA method 314.0)

Total Dissolved Solids (EPA method 160.1)

A full documentation package for these data, including raw data and sample custody documentation, has been prepared and is filed at the Region 9 Laboratory. Please contact Vance Fong of the Quality Assurance Program (PMD-3) to request review and/or validation of the data.

If you have any questions please contact Rich Bauer at (510) 412-2312, or Ken Hendrix at (510) 412-2321.

ATTACHMENT: Analytical Report

USEPA REGION 9 LABORATORY REPORT NARRATIVE

CASE NUMBER:

R01S26

SAMPLE DELIVERY GROUP:

01059C

PROGRAM:

SUPERFUND

DOCUMENT CONTROL #:

ESTW-9B-4261 03/19/01

DATE: ANALYSIS:

PERCHLORATE AND TOTAL DISSOLVED

SOLIDS

SAMPLE NUMBERS:

SAMPLE ID

LABORATORY SAMPLE ID

L. V. Wash at North Shore Road Bridge

AB30449

GENERAL COMMENTS

One water sample was received from the Colorado River Perchlorate Study Superfund project on 02/28/01.

The requested analyses were perchlorate by Region 9 Laboratory SOP #531 and total dissolved solids by Region 9 Laboratory SOP #461 (EPA Method 160.1). The perchlorate sample was analyzed within the recommended 28-day holding time. The TDS sample was analyzed outside the required 7-day holding time.

SAMPLE RECEIPT AND PRESERVATION

No shipping or preservation issues were encountered.

QA/QC SUMMARY

No analytes were detected in the LRBs associated with this SDG.

No duplicate analysis was performed for TDS due to lack of sample.

The RPD between the sample and duplicate for perchlorate was less than or equal to the 20% QC limit.

No LFM or LFM duplicate was analyzed for perchlorate; the QC sample required a 20-fold dilution.

The TDS LFB recoveries were within the 85-115% QC limits. The perchlorate LFB recovery was within the 90-110% QC limits.

Questions concerning the data can be answered by Patrick Hirata at (510) 412-2354.

GLOSSARY

Laboratory Reagent Blanks (LRB)

A laboratory reagent blank is laboratory reagent water or baked sand with all reagents added and carried through the same sample preparation and analytical procedures as the field samples. The laboratory reagent blank is used to determine the level of contamination introduced by the laboratory during analysis.

<u>Laboratory Fortified Matrix (LFM)</u>, <u>Laboratory Fortified Matrix Duplicate (LFMD) and Laboratory Duplicate</u> (LD) Analysis

The laboratory fortified matrix spike sample and laboratory duplicate analyses provide information about the effect of the sample matrix on sample preparation and measurement. Poor percent recovery (%R) results and large relative percent difference (RPD) between duplicates may indicate inconsistent laboratory technique, sample nonhomogeneity in soils, or matrix effects which may interfere with analysis.

Laboratory Fortified Blank (LFB) Analysis

The laboratory fortified blank is laboratory reagent water or baked sand with a known concentration of the analytes of interest added by the laboratory with all reagents added and carried through the same sample preparation and analytical procedures as the field samples. Poor percent recovery (%R) results may indicate inconsistent laboratory technique.

EPA REGION 9 LABORATORY-RICHMOND, CA SUMMARY OF ANALYTICAL RESULTS

Case Number:

R01S26

Analysis:

Perchlorate and TDS

Site:

Colorado River Perchlorate Study

Matrix:

Water

SDG: Date: 01059C

03/19/01

Station Location	N/A			N/A				N/A
Sample I.D.	L. V. Wash @ North Shore Road Bridge			Reagent			- 1	Quantitation
Lab Sample LD.	AB30449		İ	Blank				Limit
Date of Collection	02/27/01			N/A				N/A
Analyte (units)	Result	Q	Com	Result		Q	Com	Result
Perchlorate (ug/L)	420			5	U			5
Total Dissolved Solids (mg/L)	1600			20	U			20

Com - Comments refer to the corresponding section in the report narrative for each letter.

Filename: 01059cg.123

N/A - Not Applicable.

N/R - Not Required.

Q - Refer to data qualifiers.

U - The parameter was analyzed for, but was not detected; The associated value is the sample quantitation limit, adjusted for dilution, if any.

J - The associated value is an estimated quantity.